

1. An information processing apparatus comprising:
first converting means for converting print data
into image data;

predicting means for predicting a printing time
using the image data converted by said first converting
means and a printing time using the code data converted
by said second converting means;

selecting means for selecting said first
converting means when it is determined by said
discriminating means that the printing time using the
image data is shorter and selecting said second
converting means when it is determined by said
discriminating means that the printing time using the
image data is not shorter.

25 2. An apparatus according to claim 1, wherein said predicting means predicts the printing time on the basis of a processing time and a transmission time on a

3. An apparatus according to claim 1, wherein the
5 printing time using the image data includes a drawing
time, a transmission time, and a processing time of the
printer, and the printing time using the code data
includes a command generation time and a subclosing
time.

4. An apparatus according to claim 1, wherein the printing time using the image data includes a drawing time, a transmission time, an intermediate data generation time, and a shipping time, and the printing time using the code data includes a command generation time, a transmission time, a shipping preparation time, and a shipping time.

6. An apparatus according to claim 1, further comprising:

25 discriminating means for discriminating whether a subclose occurs in the printer if a printing is performed by the data converted by the converting means

selected by said selecting means or not; and
means for degrading a gradation of the data
converted by said converting means when it is
determined by said discriminating means that the
5 subclose occurs.

7. An apparatus according to claim 1, further
comprising judging means for judging whether an
improper drawing occurs or not by checking the print
10 data,

and wherein said selecting means selects said
first converting means when it is determined by said
judging means that the improper drawing occurs, and
selects said second converting means when it is
15 determined by said judging means that the improper
drawing does not occur.

8. An apparatus according to claim 1, further
comprising:

20 third converting means for converting the print
data into image data;

judging means for judging whether an improper
drawing occurs or not by checking the print data; and

discriminating means for discriminating whether a
25 time which is required for processing by the code data
is longer than a time which is required for processing
by the image data or not when it is determined by said

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judging means that the improper drawing does not occur,
and wherein said selecting means selects said
third converting means when it is determined by said
discriminating means that the time which is required
5 for processing by the code data is longer than the time
which is required for processing by the image data, and
selects said second converting means when it is
determined by said discriminating means that the time
which is required for processing by the code data is
10 not longer than the time which is required for
processing by the image data.

9. An apparatus according to claim 8, wherein said
first converting means performs a logical operation by
15 RGB and said third converting means performs a logical
operation by YMCK.

10. An information processing apparatus comprising:
first converting means for converting print data
20 into image data;
second converting means for converting the print
data into code data for allowing a printer to generate
the image data; and
selecting means for selecting either said first
25 converting means or said second converting means on a
logical page unit basis.

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11. An information processing method using first converting means for converting print data into image data and second converting means for converting the print data into code data for allowing a printer to generate the image data, comprising:

a predicting step of predicting a printing time using the image data converted by said first converting means and a printing time using the code data converted by said second converting means;

a discriminating step of discriminating whether the printing time using the image data is shorter than the printing time using the code data or not on the basis of a prediction result by said predicting step; and

a selecting step of selecting said first converting means when it is determined by said discriminating step that the printing time using the image data is shorter and selecting said second converting means when it is determined by said discriminating step that the printing time using the image data is not shorter.

12. A method according to claim 11, wherein in said predicting step, the printing time is predicted on the basis of a processing time and a transmission time on a host computer side and a processing time on the printer side.

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13. A method according to claim 11, wherein the printing time using the image data includes a drawing time, a transmission time, and a processing time of the printer, and the printing time using the code data includes a command generation time and a subclosing time.

14. A method according to claim 11, wherein the printing time using the image data includes a drawing time, a transmission time, an intermediate data generation time, and a shipping time, and the printing time using the code data includes a command generation time, a transmission time, a shipping preparation time, and a shipping time.

15. A method according to claim 11, wherein in said selecting step, the converting means is selected on a logical page unit basis.

16. A method according to claim 11, further comprising:

a discriminating step of discriminating whether a subclose occurs in the printer if a printing is performed by the data converted by the converting means selected by said selecting step or not; and

a step of degrading a gradation of the data converted by said converting means when it is

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determined by said discriminating step that the subclose occurs.

17. A method according to claim 11, further
5 comprising a judging step of judging whether an improper drawing occurs or not by checking the print data,

and wherein in said selecting step, said first
10 converting means is selected when it is determined by said judging step that the improper drawing occurs, and said second converting means is selected when it is determined by said judging step that the improper drawing does not occur.

18. A method using third converting means for
15 converting the print data into image data according to claim 11, further comprising:

a judging step of judging whether an improper
drawing occurs or not by checking the print data; and

20 a discriminating step of discriminating whether a time which is required for processing by the code data is longer than a time which is required for processing by the image data or not when it is determined by said judging step that the improper drawing does not occur,

25 and wherein in said selecting step, said third converting means is selected when it is determined by said discriminating step that the time which is

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required for processing by the code data is longer than the time which is required for processing by the image data, and said second converting means is selected when it is determined by said discriminating step that the
5 time which is required for processing by the code data is not longer than the time which is required for processing by the image data.

19. A method according to claim 18, wherein said
10 first converting means performs a logical operation by RGB and said third converting means performs a logical operation by YMCK.

20. An information processing method using first
15 converting means for converting print data into image data and second converting means for converting the print data into code data for allowing a printer to generate the image data, comprising:

a selecting step of selecting either said first
20 converting means or said second converting means on a logical page unit basis.

21. A storage medium which stores a program using
25 first converting means for converting print data into image data and second converting means for converting the print data into code data for allowing a printer to generate the image data, wherein said program

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comprises:

a predicting step of predicting a printing time using the image data converted by said first converting means and a printing time using the code data converted by said second converting means;

a discriminating step of discriminating whether the printing time using the image data is shorter than the printing time using the code data or not on the basis of a prediction result by said predicting step;

and

a selecting step of selecting said first converting means when it is determined by said discriminating step that the printing time using the image data is shorter and selecting said second converting means when it is determined by said discriminating step that the printing time using the image data is not shorter.

22. A medium according to claim 21, wherein in said predicting step, the printing time is predicted on the basis of a processing time and a transmission time on a host computer side and a processing time on the printer side.

23. A medium according to claim 21, wherein the printing time using the image data includes a drawing time, a transmission time, and a processing time of the

printer, and the printing time using the code data includes a command generation time and a subclosing time.

5 24. A medium according to claim 21, wherein the printing time using the image data includes a drawing time, a transmission time, an intermediate data generation time, and a shipping time, and the printing time using the code data includes a command generation
10 time, a transmission time, a shipping preparation time, and a shipping time.

15 25. A medium according to claim 21, wherein in said selecting step, the converting means is selected on a logical page unit basis.

26. A medium according to claim 21, wherein said program further comprises:

20 a discriminating step of discriminating whether a subclose occurs in the printer if a printing is performed by the data converted by the converting means selected by said selecting step or not; and

25 a step of degrading a gradation of the data converted by said converting means when it is determined by said discriminating step that the subclose occurs.

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27. A medium according to claim 21, wherein said program further comprises a judging step of judging whether an improper drawing occurs or not by checking the print data,

5 and in said selecting step, said first converting means is selected when it is determined by said judging step that the improper drawing occurs, and said second converting means is selected when it is determined by said judging step that the improper drawing does not
10 occur.

28. A medium which stores a program using third converting means for converting the print data into image data according to claim 21, wherein said program
15 further comprises: ..

a judging step of judging whether an improper drawing occurs or not by checking the print data; and

a discriminating step of discriminating whether a time which is required for processing by the code data
20 is longer than a time which is required for processing by the image data or not when it is determined by said judging step that the improper drawing does not occur,

and in said selecting step, said third converting means is selected when it is determined by said

25 discriminating step that the time which is required for processing by the code data is longer than the time which is required for processing by the image data, and

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accordance with the mode set by said setting picture

plane, converting print data by using the selected
renderer, and transmitting the converted print data to
a printer.

5 32. An information processing method comprising the
steps of:

displaying a setting picture plane for allowing
one of an auto mode, an image mode, and a PDL mode to
be set;

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10      selecting a renderer in accordance with the mode
      set by the setting picture plane;

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    converting print data by using the selected
renderer; and

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        transmitting the converted print data to a
15    printer.

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33. A storage medium which stores a program,
wherein said program comprises the steps of:

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        displaying a setting picture plane for allowing
20    one of an auto mode, an image mode, and a PDL mode to
        be set;

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        selecting a renderer in accordance with the mode
set by the setting picture plane;

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    converting print data by using the selected
25    renderer; and

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        transmitting the converted print data to a
printer.

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